

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	181	((TAKESHI) near2 (KOBAYASHI)).INV.	US-PGPUB; USPAT	ADJ	ON	2008/03/25 14:52
S2	17	((MASAAKI) near2 (KAWABE)).INV.	US-PGPUB; USPAT	ADJ	ON	2008/03/25 14:52
S3	9	((FUMINORI) near2 (KIMURA)).INV.	US-PGPUB; USPAT	ADJ	ON	2008/03/25 14:52
S4	2	((MASAHIRO) near2 (AMAGASA)).INV.	US-PGPUB; USPAT	ADJ	ON	2008/03/25 14:52
S5	793	361/502.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/25 14:52
S6	1	separator.ti. and capacitor and pore size and diameter and electrostatic spinning	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/25 14:56
S7	30	separator.ti. and capacitor and pore size and diameter	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/25 14:56
S8	2	separator.ti. and capacitor and flow pore size and diameter	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/25 14:58
S9	4	separator.ti. and capacitor and standard deviation	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/25 15:17
S10	1	separator.ti. and capacitor and standard deviation same diameter	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/25 15:18
S11	91	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber and fiber with average diameter and thickness and pore size	US-PGPUB; USPAT	ADJ	ON	2008/03/26 12:52
S12	16	separator.ab. and (electric with double with layer with capacitor) and fiber and fiber with average diameter and thickness and pore size	US-PGPUB; USPAT	ADJ	ON	2008/03/26 13:10

S13	2	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber and fiber with average diameter and thickness and pore size and electrostatic\$2 with (spin or spinning or spun)	US-PGPUB; USPAT	ADJ	ON	2008/03/26 13:16
S14	4	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber with (average or mean) near2 diameter and fiber with (mean or average) near2 flow near2 pore size	US-PGPUB; USPAT	ADJ	ON	2008/03/26 13:32
S15	1	("20020045091").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/03/26 14:08
S16	31	separator.ab. and (electric with double with layer with capacitor) and fiber and fiber with (average or mean) near2 diameter	US-PGPUB; USPAT	ADJ	ON	2008/03/26 14:15
S17	28	separator.ab. and (electric with double with layer with capacitor) and separator same fiber and fiber with (average or mean) near2 diameter	US-PGPUB; USPAT	ADJ	ON	2008/03/26 14:17
S18	4	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber with (mean or average) near2 flow near2 pore size	US-PGPUB; USPAT	ADJ	ON	2008/03/26 14:45
S19	10	separator and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber with (mean or average) near2 flow near2 pore size	US-PGPUB; USPAT	ADJ	ON	2008/03/26 15:30
S20	31	separator and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber and (mean or average) near2 flow near2 pore size	US-PGPUB; USPAT	ADJ	ON	2008/03/26 15:33

S21	9230	separator and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber and layer	US-PGPUB; USPAT	ADJ	ON	2008/03/26 15:38
S22	1865	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber and layer	US-PGPUB; USPAT	ADJ	ON	2008/03/26 15:38
S23	506	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber with diameter and layer	US-PGPUB; USPAT	ADJ	ON	2008/03/26 15:38
S24	202	separator.ti. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber with diameter and layer	US-PGPUB; USPAT	ADJ	ON	2008/03/26 15:39
S25	157	separator.ti. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber with diameter and layer with separator	US-PGPUB; USPAT	ADJ	ON	2008/03/26 15:39
S26	7	("20050063840"   "4746586"   "5902696"   "6051335"   "6444367"   "6594139"   "6905798"). PN. OR ("7112389"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 07:22
S27	341	(electric field or voltage or current) with nozzle and separator and (capacitor or battery or condensor or fuel cell or electrochemical device)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 07:24
S28	2	(electric field or voltage or current) with nozzle and separator and (capacitor or battery or condensor or fuel cell or electrochemical device) and (mean or average) near2 flow near2 pore size	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 07:25

S29	189	(electric field or voltage or current) with nozzle and separator and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 07:25
S30	175	(electric field or voltage or current) with nozzle and separator and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber and diameter	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 07:25
S31	5	(electric field or voltage or current) with nozzle and separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber and diameter	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 07:27
S32	1	("2002/0090876").URPN.	USPAT	ADJ	ON	2008/03/27 07:32
S34	335	fine with fiber and separator and (capacitor or battery or condensor or fuel cell or electrochemical device) and layer and (average or mean) with diameter	US-PGPUB; USPAT	ADJ	ON	2008/03/27 07:42
S35	1	("2002/0090876").URPN.	US-PGPUB; USPAT	ADJ	ON	2008/03/27 07:43
S36	114	fine with fiber and separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and layer and (average or mean) with diameter	US-PGPUB; USPAT	ADJ	ON	2008/03/27 07:43
S37	82	fine with fiber and separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and layer with separator and (average or mean) with diameter	US-PGPUB; USPAT	ADJ	ON	2008/03/27 07:44
S38	206	separator.ab. and battery and double layer capacitor	US-PGPUB; USPAT	ADJ	ON	2008/03/27 08:00
S39	33	separator.ti. and battery and double layer capacitor	US-PGPUB; USPAT	ADJ	ON	2008/03/27 08:01

S42	149	double layer capacitor and separator and fiber with (polyacrylonitrile or polyvinylidene fluoride or polyimide or nylon or polystyrene or polyethylene glycol or polyvinyl alcohol or polyvinyl pyrrolidone)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 09:55
S43	2	double layer capacitor and separator and fiber with (polyacrylonitrile or polyvinylidene fluoride or polyimide or nylon or polystyrene or polyethylene glycol or polyvinyl alcohol or polyvinyl pyrrolidone) and (average or mean) with diameter and (maximum or largest) with pore size	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 09:55
S44	46	double layer capacitor and separator and fiber with (polyacrylonitrile or polyvinylidene fluoride or polyimide or nylon or polystyrene or polyethylene glycol or polyvinyl alcohol or polyvinyl pyrrolidone) and (average or mean) with diameter	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 09:56
S45	144	separator.ab. and fiber with (polyacrylonitrile or polyvinylidene fluoride or polyimide or nylon or polystyrene or polyethylene glycol or polyvinyl alcohol or polyvinyl pyrrolidone) and (average or mean) with diameter and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 09:59

S46	15	separator.ab. and fiber with (polyacrylonitrile or polyvinylidene fluoride or polyimide or nylon or polystyrene or polyethylene glycol or polyvinyl alcohol or polyvinyl pyrrolidone) and (average or mean) with diameter and (capacitor or battery or condensor or fuel cell or electrochemical device) and fiber and (maximum or largest) with pore size	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 10:02
S47	0	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and (fine or small or ultrafine) with fiber with layer and iber with layer	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 11:06
S48	103	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and (fine or small or ultrafine) with fiber with layer and fiber with layer	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 11:07
S49	1001	separator and (double layer capacitor and battery)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 11:45
S50	575	separator and (double layer capacitor with battery)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 11:47
S51	393	separator and (electric double layer capacitor with battery)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 11:49
S52	5	separator.ab. and (capacitor or battery or condensor or fuel cell or electrochemical device) and (fine or small or ultrafine) with fiber with layer and ((non with (fine or small)) or large) fiber with layer	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/03/27 12:42
S53	2	((("5962161") or ("4908282")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/03/27 12:52

S54	23	(US-20070247785-\$ or US-20010006452-\$ or US-20030054237-\$ or US-20030054236-\$ or US-20030054235-\$ or US-20030054234-\$ or US-20030054233-\$ or US-20030054232-\$ or US-20020160260-\$ or US-20020090876-\$ or US-20020045091-\$ or US-20030096171-\$ or US-20050032451-\$ or US-20050095478-\$).did. or (US-7112389-\$ or US-6233135-\$ or US-6730439-\$ or US-6284680-\$ or US-3753784-\$ or US-4165352-\$ or US-5336274-\$ or US-5402306-\$ or US-6723467-\$).did.	US-PGPUB; USPAT	ADJ	ON	2008/10/08 06:31
S55	18	S54 and (apparent density or density or (surface density and thickness))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/10/08 06:32
S56	9	S54 and (apparent density or bulk density or (surface density and thickness))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/10/08 06:36
S57	157	separator and double with capacitor and (apparent density or bulk density or (surface density and thickness))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/10/08 06:51
S58	48	separator.ab.ti. and double with capacitor and (apparent density or bulk density or (surface density and thickness))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/10/08 06:52
S59	12	separator.ti. and double with capacitor and (apparent density or bulk density or (surface density and thickness))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/10/08 06:53
S60	336	separator.ti. and (apparent density or bulk density or (surface density and thickness))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/10/08 07:55

S61	147	separator with (capacitor or battery).ti. and (apparent density or bulk density or (surface density and thickness))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/10/08 07:55
S62	141	separator with (apparent density or bulk density or (surface density and thickness)) and (capacitor or battery)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/10/08 07:57
S63	151	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/19 14:03
S64	4	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) with advantages	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/19 14:05
S67	0	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density) with (less than or more than)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/19 14:24
S68	47	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density) with (less or more )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/19 14:24
S71	9	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor) and (apparent density or bulk density) with (less or more )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/19 14:26



S72	0	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor) and (apparent density or bulk density) with advantage	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/19 14:30
S73	4	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density) with advantage	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/19 14:30
S74	4	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density) with (advantage or more near3 than or less near3 than)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 09:06
S75	4	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density) with (advantage or "more than" or "less than")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 09:07
S76	0	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density) with ("more than" or "less than")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 09:07

S77	58	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density) with (more or less or greater or lesser or above or below)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 09:07
S78	29	separator with (apparent density or bulk density or ((surface density or mass per unit area) and thickness)) and (capacitor or battery) and (apparent density or bulk density) with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 09:34
S80	68	separator with (apparent density or bulk density or ((surface density or mass near4 per near4 area) and thickness)) and (capacitor or battery) and separator with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 09:44
S81	139	separator with (apparent density or bulk density or ((surface density or unit near6 (mass or weight)) and thickness)) and (capacitor or battery) and separator with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 09:50

S82	29	separator with (apparent density or bulk density or ((surface density or unit near6 (mass or weight)) and thickness))and (capacitor or battery) and (apparent density or bulk density) with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 09:51
S83	1	("5928811").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/11/20 10:11
S84	5	("4330602"   "5158647"   "6104600"   "6310763").PN. OR ("6411497").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/20 10:16
S85	461	separator with (density or ((surface density or unit near6 (mass or weight)) and thickness))and (capacitor or battery) and (density) with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 10:19
S86	362	separator with (density or ((surface density or unit near6 (mass or weight)) and thickness))and (capacitor or battery) and separator same (density) with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 10:20

S87	0	separator with (density or ((surface density or unit near6 (mass or weight)) and thickness))and (capacitorwith double) and separator same (density) with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 10:22
S88	52	separator with (density or ((surface density or unit near6 (mass or weight)) and thickness))and (capacitor with double) and separator same (density) with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 10:22
S89	76	separator with (density or ((surface density or unit near6 (mass or weight)) and thickness))and (capacitor) and separator same (density) with (handling property or pore size or distribution near3 pore size or leakage near5 current or short circuit or holding near3 electrolyte or porosity or (ionic or ion) near4 permeability)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 10:51
S90	532	separator with (density or ((surface density or unit near6 (mass or weight)) and thickness))and (capacitor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 11:06
S91	237	separator with (density or ((surface density or unit near6 (mass or weight)) and thickness)) and (capacitor with double)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 11:06

S92	211	separator with (density or ((surface density or unit near6 (mass or weight)) and thickness)) and (capacitor near5 double)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 11:07
S93	20	separator with (apparent density or ((surface density or unit near6 (mass or weight)) and thickness)) and (capacitor near5 double)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 11:08
S94	33	separator with (apparent density or ((surface density or unit near6 (mass or weight)) and thickness)) and (capacitor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 11:12
S97	182	separator with (apparent density or ((surface density or unit near6 (mass or weight)) and thickness)) and (battery)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 15:39
S98	182	separator with (apparent density or ((surface density or unit near6 (mass or weight)) and thickness)) and (battery or supercapacitor or ultracapacitor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 15:40
S99	62	separator with (apparent density) and (battery or supercapacitor or ultracapacitor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/11/20 15:40

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